

S/N 09/702,093  
Docket no. 15260  
Filed October 30, 2000

REMARKS

In light of the restriction requirement, Applicants request that the Title of the Application be amended to more closely reflect the subject matter of the remaining claims.

Applicants acknowledge the Examiners statement that the IDSs of 3/29/02 and 4/15/02 have been considered.

The Examiner has rejected claims 10 – 13 under 35 USC §112. Claim 10 has been amended to respond to this rejection.

The Examiner has rejected claims 1 – 13 under 35 USC §102(b) as anticipated by, or in the alternative, under 35 USC 103(a) as obvious over Battrell (US Patent 4,292,035).

Applicants note that Battrell's invention requires the addition of a smectite clay in order to form a softener/clay complex, to which a large amount of an anionic surfactant is then added. In the instant invention, neither clay nor an anionic surfactant is used. In fact, the addition of an anionic surfactant to the instant invention would have two negative consequences. Firstly, the anionic surfactant would complex with the cationic materials present in the formula and form a precipitate, making the formulation unusable. Secondly, Applicants believe the addition of the anionic surfactant would alter the surface energy of the media to be printed upon (i.e., fabric) in such a way as to negatively impact image quality by causing significant dot spreading. Battrell's teaching is, therefore, in direct conflict with the instant invention. Applicants have amended the claims to indicate that the fabric softener is cationic or non-ionic, as taught at page 6, lines 18 and 19, of the specification and submit that Battrell neither anticipates nor makes obvious the invention as presently claimed.

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The Examiner has rejected claims 10 – 13 under 35 USC §102(b or e) as anticipated by, or in the alternative, under 35 USC 103(a) as obvious over Sakkab (US Patent 4,255,273), Cheng (US Patent 4,409,136), Ives et al. (US Patent 4,514,444), or Dovey et al. (US Patent 6,200,944).

Sakkab's invention is directed at the bleaching of stains and other undesirable colorants. Sakkab must, therefore, use a bleaching component, identified as a water soluble photo-activator, in order to effect this process. In the instant invention, a photo-activator would destroy the intended function for which the formulation was devised, namely as a colorant receptor and image control agent for the media used (i.e., fabric). Sakkab optimized his formulation to accomplish photo-bleaching, thus teaching away from the instant inventive formulation for color fastness and color reception.

Cheng's invention is directed to the formulation of a zeolite built detergent paste. This paste is intended to provide detergency under a wide range of conditions. Each component chosen by Cheng is important in reaching the desired result. The instant invention does not use non-ionic PEO alcohol detergents, sodium silicate, zeolites, or anionic surfactants. In fact, the use of such surfactant materials in the instant invention would negate the functionality of the cationic components responsible for image quality.

Ives' invention broadly encompasses fabric solid conditioning and cleaning compositions. These compositions comprise a fabric conditioning agent, along with active agents for cleaning and/or bleaching. The purpose of the instant invention is not to clean or condition the media of choice (i.e., fabric), but is to prepare the fabric for receiving inkjet colorants. Many of the components used in Ives are optimized to effect cleaning. The instant invention has no such cleaners, nor does it have detergency builders or other essential components of cleaning formulations. While it is true that the instant invention and Ives

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share certain components in common, these components function in very different ways for different purposes.

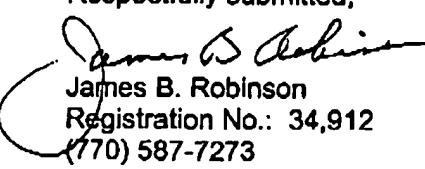
Dovey's invention, like that of Sakkab, is directed at the bleaching of stains and other unwanted colorants. Dovey requires the use of a photo-activated bleach precursor in order to effect the bleaching process. Further, the desired form of the finished product is as a coated solid. Dovey's coated solid disintegrates upon use and each component becomes soluble, thus accomplishing the finished result. The instant invention utilizes a liquid formulation that is then padded onto the media of choice (i.e., fabric) and dried, and the active ingredients stay affixed to the media in order to effect color retention, brightness and image quality. Applicants believe that photo-activated bleaches cannot be used as a part of the formulation since a photo-active bleach will discolor any ink subsequently printed on the media.

It is respectfully submitted that the cited and applied references are different in concept and construction from the present invention, and that any combination of these references would still not suggest the crux of the instant improvement. Accordingly, this novelty and obviousness rejection is not believed to be warranted and should be withdrawn.

Applicants respectfully request that the rejection of the pending claims under 35 USC §§ 112, 102 and 103 be reconsidered and withdrawn in light of the preceding amendments and remarks.

Should the Examiner have any issues he would like to discuss in order to facilitate the progression of this application, he is encouraged to call the undersigned at (770)-587-7273.

Respectfully submitted;

  
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Title with changes indicated

COATING FOR TREATING SUBSTRATES FOR INK JET PRINTING INCLUDING IMBIBING SOLUTION FOR ENHANCED IMAGE VISUALIZATION AND RETENTION[, METHOD FOR TREATING SAID SUBSTRATES, AND ARTICLES PRODUCED THEREFROM]

Claims with changes Indicated.

Claim 1 (twice amended): An aqueous coating formulation containing solids, for enhancing image visualization and retention of reactive dye-based inks, comprising:

- a) a cationic homopolymer or copolymer,
- b) a cationic or non-ionic fabric softener; and
- c) urea, and
- d) an ingredient selected from the group consisting of sodium bicarbonate, sodium carbonate and combinations thereof.

Claim 10 (twice amended): An aqueous imbibing solution, for enhancing image visualization and retention of reactive dye-based inks comprising:

- c) an ingredient selected from the group consisting of sodium bicarbonate, sodium carbonate, and combinations thereof, and,
- d) urea.